## **Gary Hastings**

List of Publications by Year in descending order

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		279798	330143
55	1,488 citations	23	37
papers	citations	h-index	g-index
			074
55	55	55	874
all docs	docs citations	times ranked	citing authors

#	Article	IF	CITATIONS
1	Experimental and calculated infrared spectra of disubstituted naphthoquinones. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2022, 268, 120674.	3.9	5
2	Assessment of the orientation and conformation of pigments in protein binding sites from infrared difference spectra. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148366.	1.0	5
3	The effect of hydrogen-bonding on flavin's infrared absorption spectrum. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2021, 262, 120110.	3.9	8
4	Time-resolved FTIR difference spectroscopy for the study of quinones in the A1 binding site in photosystem I: Identification of neutral state quinone bands. Biochimica Et Biophysica Acta - Bioenergetics, 2020, 1861, 148173.	1.0	8
5	Reversible inhibition and reactivation of electron transfer in photosystem I. Photosynthesis Research, 2020, 145, 97-109.	2.9	10
6	Calculated vibrational properties of semiquinones in the A1 binding site in photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 2019, 1860, 699-707.	1.0	8
7	Fourier transform visible and infrared difference spectroscopy for the study of P700 in photosystem I from Fischerella thermalis PCC 7521 cells grown under white light and far-red light: Evidence that the A–1 cofactor is chlorophyll f. Biochimica Et Biophysica Acta - Bioenergetics, 2019, 1860, 452-460.	1.0	16
8	Modelling electron transfer in photosystem I: limits and perspectives. Physiologia Plantarum, 2019, 166, 73-87.	5.2	11
9	Photosystem I with benzoquinone analogues incorporated into the A1 binding site. Photosynthesis Research, 2018, 137, 85-93.	2.9	5
10	Time-resolved step-scan FTIR difference spectroscopy for the study of photosystem I with different benzoquinones incorporated into the A1 binding site. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 1199-1206.	1.0	8
11	Probing structural changes in single enveloped virus particles using nano-infrared spectroscopic imaging. PLoS ONE, 2018, 13, e0199112.	2.5	31
12	Quinones in the A1 binding site in photosystem I studied using time-resolved FTIR difference spectroscopy. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 804-813.	1.0	15
13	Inverted-region electron transfer as a mechanism for enhancing photosynthetic solar energy conversion efficiency. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 9267-9272.	7.1	39
14	Time-resolved visible and infrared absorption spectroscopy data obtained using photosystem I particles with non-native quinones incorporated into the A1 binding site. Data in Brief, 2016, 7, 1463-1468.	1.0	13
15	Modeling electron transfer in photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 723-733.	1.0	38
16	Time-resolved visible and infrared difference spectroscopy for the study of photosystem I with different quinones incorporated into the A1 binding site. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 343-354.	1.0	24
17	Directionality of electron transfer in cyanobacterial photosystem I at 298 and 77 K. FEBS Letters, 2015, 589, 1412-1417.	2.8	40
18	Vibrational spectroscopy of photosystem I. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 55-68.	1.0	23

#	Article	IF	Citations
19	On the Nature of the Hydrogen Bonds to Neutral Ubiquinone in the QA Binding Site in Purple Bacterial Photosynthetic Reaction Centers. Journal of Physical Chemistry B, 2013, 117, 8705-8713.	2.6	8
20	Comparison of calculated and experimental isotope edited FTIR difference spectra for purple bacterial photosynthetic reaction centers with different quinones incorporated into the QA binding site. Frontiers in Plant Science, 2013, 4, 328.	3.6	12
21	Calculated Vibrational Properties of Ubisemiquinones. Computational Biology Journal, 2013, 2013, 1-11.	0.6	2
22	Introduction of a Hydrogen Bond between Phylloquinone PhQ <sub>A</sub> and a Threonine Side-Chain OH Group in Photosystem I. Journal of Physical Chemistry B, 2012, 116, 14008-14016.	2.6	13
23	Integrating a partial least squares model with an artificial neural network to discriminate FTIR spectra of virus infected vero cells at 6 hours post exposure. , 2011, , .		0
24	Comparison of calculated and experimental FTIR spectra of specifically labeled ubiquinones. Vibrational Spectroscopy, 2011, 55, 279-286.	2.2	12
25	Calculated vibrational properties of pigments in protein binding sites. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10526-10531.	7.1	17
26	Viral infection of cells in culture detected using infrared microscopy. Analyst, The, 2009, 134, 1462.	3.5	9
27	Infrared microscopy for the study of biological cell monolayers. I. Spectral effects of acetone and formalin fixation. Biopolymers, 2008, 89, 921-930.	2.4	24
28	Calculation of the Vibrational Properties of Chlorophyll <i>a</i> in Solution. Journal of Physical Chemistry B, 2008, 112, 14056-14062.	2.6	16
29	Time-Resolved FTIR Difference Spectroscopy in Combination with Specific Isotope Labeling for the Study of A1, the Secondary Electron Acceptor in Photosystem 1. Biophysical Journal, 2008, 94, 4383-4392.	0.5	29
30	Quinone Anion Bands in A1 $\hat{a}^{\prime\prime}$ /A1 FTIR Difference Spectra Investigated Using Photosystem I Particles with Specifically Labeled Naphthoquinones Incorporated into the A1 Binding Site., 2008,, 73-76.		1
31	Density functional theory based calculations of the vibrational properties of chlorophyll-a. Vibrational Spectroscopy, 2007, 44, 357-368.	2.2	22
32	Vibrational mode frequency calculations of chlorophyll-d for assessing (P740+-P740) FTIR difference spectra obtained using photosystem I particles from Acaryochloris marina. Photosynthesis Research, 2007, 95, 55-62.	2.9	11
33	Time-Resolved FTIR Difference Spectroscopy for the Study of Photosystem I Particles with Plastoquinone-9 Occupying the A1Binding Siteâ€. Biochemistry, 2006, 45, 12733-12740.	2.5	14
34	Modification of the Phylloquinone in the A1Binding Site in Photosystem I Studied Using Time-Resolved FTIR Difference Spectroscopy and Density Functional Theoryâ€. Biochemistry, 2006, 45, 4121-4127.	2.5	19
35	Modeling the A1 binding site in photosystem. Vibrational Spectroscopy, 2006, 42, 78-87.	2.2	21
36	Fourier Transform Infrared Studies of the Secondary Electron Acceptor, A1., 2006, , 301-318.		2

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37	A1 Reduction in Intact Cyanobacterial Photosystem I Particles Studied by Time-Resolved Step-Scan Fourier Transform Infrared Difference Spectroscopy and Isotope Labeling. Biochemistry, 2005, 44, 1880-1893.	2.5	31
38	Mutation of the Putative Hydrogen-Bond Donor to P700of Photosystem Iâ€. Biochemistry, 2004, 43, 12634-12647.	2.5	43
39	FTIR Difference Spectroscopy in Combination with Isotope Labeling for Identification of the Carbonyl Modes of P700 and P700+ in Photosystem I. Biophysical Journal, 2004, 86, 1061-1073.	0.5	31
40	Mutation Induced Modulation of Hydrogen Bonding to P700 Studied Using FTIR Difference Spectroscopyâ€. Biochemistry, 2003, 42, 9889-9897.	2.5	18
41	Photo-Oxidation of P740, the Primary Electron Donor in Photosystem I from Acaryochloris marina. Biophysical Journal, 2003, 85, 3162-3172.	0.5	31
42	Subpicosecond photoinduced electron transfer from a conjugated polymer to SnO2 semiconductor nanocrystals. Physica E: Low-Dimensional Systems and Nanostructures, 2002, 14, 215-218.	2.7	25
43	Temperature-Induced Formation of a Non-Native Intermediate State of the All - Î <sup>2</sup> Sheet Protein CD2. Cell Biochemistry and Biophysics, 2002, 36, 01-18.	1.8	7
44	Primary Donor Photo-Oxidation in Photosystem I: A Re-Evaluation of (P700+â^' P700) Fourier Transform Infrared Difference Spectraâ€. Biochemistry, 2001, 40, 12943-12949.	2.5	30
45	Time-Resolved Step-Scan Fourier Transform Infrared and Visible Absorption Difference Spectroscopy for the Study of Photosystem I. Applied Spectroscopy, 2001, 55, 894-900.	2.2	31
46	A Fourier Transform Infrared Absorption Difference Spectrum Associated with the Reduction of A1in Photosystem I: Are Both Phylloquinones Involved in Electron Transfer?â€. Biochemistry, 2001, 40, 3681-3689.	2.5	29
47	Ultrafast and long-lived photoinduced charge separation in MEH-PPV/nanoporous semiconductor thin film composites. Chemical Physics Letters, 2001, 347, 304-310.	2.6	85
48	Photoinhibition of Photosystem I electron transfer activity in isolated Photosystem I preparations with different chlorophyll contents. Photosynthesis Research, 1996, 47, 121-130.	2.9	52
49	Universality of Energy and Electron Transfer Processes in Photosystem I. Biochemistry, 1995, 34, 15512-15522.	2.5	93
50	Observation of the Reduction and Reoxidation of the Primary Electron Acceptor in Photosystem I. Biochemistry, 1994, 33, 3193-3200.	2.5	104
51	Time-Resolved Fluorescence and Absorption Spectroscopy of Photosystem I. Biochemistry, 1994, 33, 3185-3192.	2.5	91
52	Delayed Fluorescence from Fe-S Type Photosynthetic Reaction Centers at Low Redox Potential. Biochemistry, 1994, 33, 3096-3105.	2.5	53
53	Rate of oxidation of P680 in isolated photosystem 2 reaction centers monitored by loss of chlorophyll stimulated emission. Biochemistry, 1993, 32, 8259-8267.	2.5	50
54	Observation of pheophytin reduction in photosystem two reaction centers using femtosecond transient absorption spectroscopy. Biochemistry, 1992, 31, 7638-7647.	2.5	100

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55	Determination of P680 singlet state lifetimes in photosystem two reaction centres. Chemical Physics Letters, 1992, 188, 54-60.	2.6	45